44th YEAR OF PUBLICATION

SCHOOL AND SOCIETY

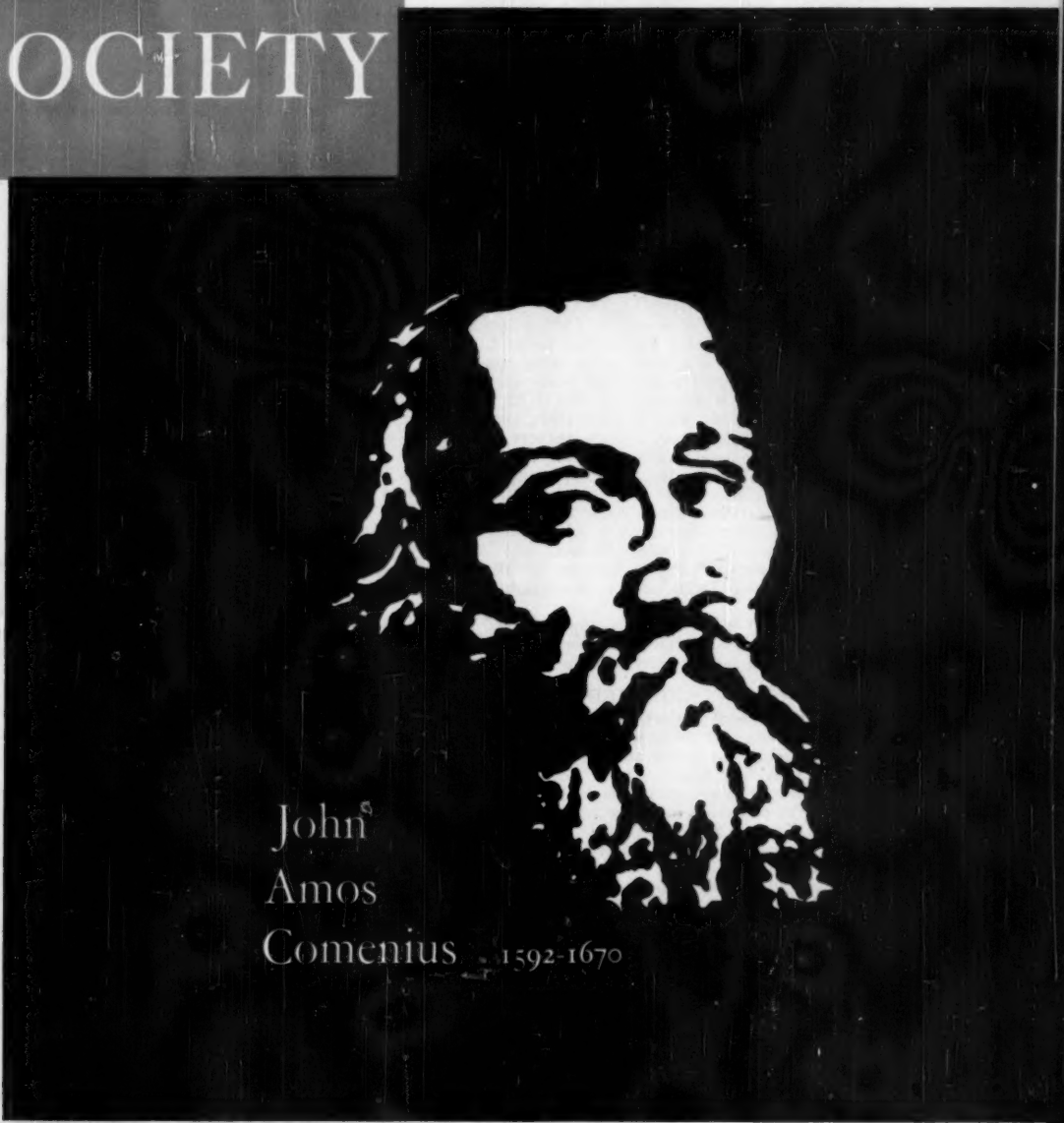
IS RUSSIA REALLY OUT-PRODUCING US IN SCIENTISTS?

By ROBERT J. HAVIGHURST

THE ALL-YEAR SCHOOL: PRO AND CON

CREATIVE POTENTIAL OF COLLEGE YOUTH

April 26, 1958



John Amos Comenius 1592-1670

Educational Ticker Tape

If additional, detailed information is desired concerning news items in this column, write to SCHOOL AND SOCIETY'S Information Service, enclosing 50 cents for each item requested.

SURVEY OF ADULT EDUCATION IN U. S.

About 8,000,000 persons in the U. S. attend at least one formal adult education class each year, reports the U. S. Office of Education. This was learned in a national survey —first of its kind—conducted by the Bureau of the Census and financed by a $10,000 grant from the Fund for Adult Education to the Adult Education Association, U. S. A., which handled the contractual arrangements. The survey was requested by the Office of Education.

The study included only organized adult courses and series of adult education meetings. It excluded correspondence courses, individual instruction, private lessons, one-time group meetings, education by radio and TV, self-directed study, and on-the-job training.

The survey reveals that almost 30% of the students in adult education classes are over 45 years of age and that more than 70% are over 30. Most popular subjects are in the trade, business, and technical fields in which about one-third of the adult students were enrolled. Other favorite subject areas are general education, civic and public affairs, home and family living, agriculture, recreation, and Americanization studies. It was recommended that questions on adult education be included in the 1960 census.

7,500 SOVIET BOOKS A MINUTE IN 1957

A total of 1,100,000,000 volumes, or 7,500 volumes a minute, were published during 1957 in the Soviet Union in the 85 languages used in various parts of the country. French writers are the most widely read foreign authors in the U. S. S. R., with Victor Hugo and Jules Verne heading the list. In recent years a great effort has been made to introduce 20th-century French authors to the Soviet public, and the works of Roger Martin du Gard, François Mauriac, Vercors, Saint-Exupéry, and Louis Aragon are very popular.

The foreign author whose books enjoy the biggest circulation is Jack London. Other favorites among American writers are O. Henry, Theodore Dreiser, and Mark Twain. The most popular English authors are Dickens, H. G. Wells, Daniel Defoe, Swift, Galsworthy, and Shakespeare.

Arab literature also is being increasingly translated and published in the U. S. S. R. Over the past two years, a total of 2,383,000 volumes has been published. (UNESCO)

JOBS AS AID FOR SUPERIOR STUDENTS

Seventy-five high-school seniors, with superior scholarship records and financial need, will be selected by the University of Illinois this spring and assigned to jobs in the university providing earnings from $300 to $500 for the academic year. The program is experimental and, if successful, may be expanded in future years, according to C. W. Sanford, dean of admissions and records. It is part of an over-all effort to encourage superior students, who might not attend the university because of financial reasons, to continue higher education.

High-school principals are being invited to submit names and qualifications of high ranking, deserving students who they believe should be considered for this financial aid program. Names of applicants should be forwarded to Donald A. Grossman, director of undergraduate scholarship programs, 100a Administration Bldg., University of Illinois, Urbana, Ill.

BASIC RESEARCH LABORATORIES ADVOCATED FOR THE NATION'S UNIVERSITIES

Creation of several dozen basic research laboratories at universities throughout the U. S., with facilities for exploring deeply into nature's secrets, was advocated March

(Continued on page 202)

SCHOOL AND SOCIETY

APRIL 26, 1958

Volume 86 **Number 2131**

COVER

From the front cover of the book, "John Amos Comenius, 1592-1670: Selections" (Paris: Unesco, 1957), published in commemoration of the third centenary of the publication of "Opera Didactica Omnia," 1657-1957
Unesco Documents & Publication Service

ARTICLES

Is Russia Really Out-Producing Us in Scientists ..... *Robert J. Havighurst* 187
The All-Year School, Pro and Con *William J. Fitzpatrick* 191
Three Centuries of Comenius' Contributions to Education *William W. Brickman* 192

SPECIAL CONFERENCE REPORTS

Creative Potential of College Youth *H. Donald Winbigler* 194
A Conference on Mathematics Training and Research ..... *A. Adrian Albert* 195

RESEARCH

Scholastic Aptitude Test Scores of SEB Member Schools .... *John F. Gummere* 197
Speaker Effectiveness and the Brown-Carlson Listening Test *John H. Haberland* 198

EVENTS

A Decade of International Educational Exchange; Teaching in the Future; Preparing More Engineering Teachers; ACLS Grants; Problems of Rural Superintendents; Educational Facilities Laboratories; Improving New York State Schools; A Russian Technical Journal in English 199

Recent Publications 196

Editor **WILLIAM W. BRICKMAN**
Managing Editor **STANLEY LEHRER**

SOCIETY FOR THE ADVANCEMENT OF EDUCATION

Trustees: Chairman, RAYMOND WALTERS, President Emeritus, University of Cincinnati
JAMES E. ALLEN, JR., Commissioner of Education, New York State Education Department
THEODORE A. DISTLER, Executive Director, Association of American Colleges
FRANCIS KEPPEL, Dean, Graduate School of Education, Harvard University
ERNEST O. MELBY, Distinguished Professor of Education, Michigan State University
GEORGE D. STODDARD, Dean, School of Education, New York University
ROSCOE L. WEST, President Emeritus, New Jersey State Teachers College, Trenton
Treasurer: STANLEY LEHRER
Secretary: WILLIAM W. BRICKMAN

SCHOOL AND SOCIETY is published biweekly, except in July and August, by the Society for the Advancement of Education, Inc., 1834 Broadway, New York 23, N. Y. Second-class mail privileges authorized at New Haven, Conn.

Editorial and Executive Offices: 1834 Broadway, New York 23, N. Y. Contributors should provide adequate postage for return of unacceptable manuscripts or illustrative matter. No material may be reprinted without permission of the editors and of the authors of signed articles. Opinions expressed in signed articles do not necessarily represent the views of the editors and the Society. Advertising rate card available on request.

Subscription: $7.50 (1 year), $14.50 (2 years). Add $1.00 per year for postage on foreign orders.

Current and Back Copies: 50c a copy (less than one year; two or more current copies, 40c each); one to five years, 75c. Special rates for older issues and complete volumes.

Education's National Biweekly

Is Russia Really Out-Producing Us in Scientists?

By ROBERT J. HAVIGHURST[1]
The University of Chicago

WE HAVE BEEN HEARING from an assortment of admirals, generals, senators, columnists, and university presidents lately a curious proposition: Russia produces more engineers and scientists than the United States; therefore, Russian education is better than American education; and, therefore, American education should become more like Russian education. When we examine the basis for this proposition, we find a very few, ill-chosen facts which easily lead one to faulty conclusions.

There are three basic questions: How do the Soviet Union and the U.S.A. compare in numbers of university graduates and in science graduates? What is the quality of these graduates? How do Russia and the U.S.A. compare in quality of education?

Looking at the question of how many university graduates are produced by Russia and the U.S.A., let us first consider the numbers of graduates in engineering, mathematics, and in science. It is useful to combine these fields, because a good many Russian engineers do work which is done by physicists or chemists or mathematicians in the U.S.A. According to "Soviet Professional Manpower," written by Nicholas De Witt for the U.S. National Science Foundation, Russia graduated 65,000 people in this category in 1954, while the U.S.A. graduated 48,000. Thus, by this kind of comparison, Russia is currently out-producing the U.S.A. in engineers and scientists.

But let us take account of the numbers of young people from whom these scientists were chosen and thereby introduce the concept of *effort*. The effort of a nation in producing engineers, or any other types of persons, should be defined in relation to the number of young people who are in the basic manpower pool. Thus, if one country has only one-tenth as many young people as another country, it will be equal in effort to the larger country if it produces one-tenth as many scientists.

In *effort* the U.S.A. is superior to the Soviet Union in the production of scientists and engineers. According to the Russian census reports, the Soviet Union had 202,000,000 inhabitants in 1956, when the U.S.A. had about 170,000,000. Furthermore, Russia has almost twice as many young people of university age as the U.S.A. currently, due to differences in the age-structure of the population in the two countries. The Soviet Union has been producing about 4,000,000 22-year-olds a year for several years, while the U.S.A. has been producing a few more than 2,000,000 a year (Table 1).

The U.S.A. has been producing more engineers and physical scientists *per thousand 22-year-olds* than the Soviet Union (Table 1). In 1954, the U.S.A. produced 20 per 1,000 as compared with 17 per 1,000 in the Soviet Union, while in the 1946-50 period, the U.S.A. produced 26 per 1,000 as compared with 11 per 1,000 in the Soviet Union.

At the same time, the U.S.A. has been out-producing the Soviet Union in other fields of training, both in terms of *effort* and in terms of gross numbers. The Soviet Union in 1956 gave the equivalent of our bachelors and first professional degrees to 200,000 young people, while the U.S.A. produced 300,000. Measured in terms of

TABLE 1
"Effort" Going into Production of University Graduates

Year	U.S.A. No. of 22-yr.-olds (thousands)	U.S.A. Univ. Grads. per 1,000 22-yr.-olds	U.S.A. Graduating Engineers & Scientists per 1,000 22-yr. olds	U.S.S.R. No. of 22-yr.-olds (thousands)	U.S.S.R. Univ. Grads. per 1,000 22-yr.-olds	U.S.S.R. Graduating Engineers & Scientists per 1,000 22-yr. olds
1928-30 (Average)	2,000	58	11	2,900	12	4
1940	2,400	77	13	3,200	32	11
1946-50 (Average)	2,400	118	26	4,000	33	11
1954	2,150	135	20	3,800	46	17
1960	2,300			4,400		
1965	2,900			3,700		
1970	3,600			4,200		
1975	3,900			4,800		

[1] Professor of education, but previously an instructor of physics and chemistry in secondary schools and universities. Dr. Havighurst holds a Ph.D. in chemistry.

effort, the U.S.A. spent three times the effort of the Soviet Union in producing university graduates in 1956.

In the U.S.A. there has been a wider variety of jobs open to college graduates than in the Soviet Union. The Russians have concentrated on steering their university students into jobs in engineering, medicine, and other applied sciences.

With so much demand and so many jobs for college graduates in the U.S.A., we have produced, nevertheless, the numbers we required until the last few years, when we suffered from a shortage of university-trained people. This is due to a combination of three factors: a great postwar economic boom which has increased the need for university-trained technical experts and executives in business and industry; the low birthrates of the depression years of the 1930's, which give us an abnormally low supply of young adults in the 1950's; and the great upswing in the birthrate since 1946, which has crowded the schools and created an enormous demand for university-trained teachers.

Thus, at present, even though our "effort" is greater than that of the Soviet Union, and even though we have record enrollments in the colleges, we are short of engineers, scientists, teachers, and nurses; and we will continue to suffer from those shortages until after 1960. Then the upward trend of the birthrate, which commenced in 1942, will begin to increase the numbers in the manpower reservoir from which the university graduates are drawn. By 1966 we will have 3,000,000 new 22-year-olds, 50% more than we have now, and by 1975 we shall approach the number of 4,000,000 22-year-olds. Indeed, some people fear that we shall have an oversupply of university graduates by 1975; but our economy may have expanded by that time to need far greater numbers than it uses now.

While the U.S.A. is overcoming its deficit in young manpower, the Russians may have shortages during the next decade because of their great loss of births during the war years of the 1940's. Russia will have to make much greater efforts in the 1960's to recruit and train her ablest youth, since she will have a substantial decrease in numbers of young adults in the decade after 1960.

Thus, the fact is that Russia produces more engineers and scientists than the U.S.A. only because Russia has a greater population. Nevertheless, the U.S.A. makes a greater "effort" to produce engineers and scientists than Russia does. Furthermore, the U.S.A. will immensely expand its production of university-trained scientists and others after 1960, when the high birthrates of the 1940's and 1950's have their effect on the population of young adults.

There is no danger in America of our not having enough men and women to build and guide our machines. We soon will have 4,000,000 young people coming of age each year. Russia, with a larger population, will have 5,000,000 young adults a year. This is ample for each country for the rest of the present century.

Although the American educational system actually produces more scientists and engineers per 1,000 youth in the population than the Russian system, some critics will argue that we ought to produce even more because we need them and because we have relatively more boys and girls in school and college than the Russians have. These critics point to the greater amount of science and mathematics in the Russian school curriculum and claim that this makes the Russian schools better than the American schools in producing scientists and engineers.

Sometimes these people seem to be saying that the Russian system produces *better* scientists and sometimes only that it produces *more* scientists. The question whether Russian scientists are better than American scientists cannot be answered on the basis of our present knowledge. However, we may ask whether Russian education in science is better than American education in science.

Comparisons of Soviet and American university education in the sciences have been made by De Witt, who thinks they are of about the same quality. A discussion of the quality of Soviet education in science, held by the Thomas Alva Edison Foundation in 1956, indicated that the several American scientists who had compared Russian and American textbooks and courses of study were quite respectful of the Russian system but thought it no better than the American system of science education in the universities.

If the Soviet system of science education is no better than the American system, why did the Russians succeed in launching a satellite first? There can be several answers to this question. One is that American research effort has been spread over a wider variety of problems, including the biological research which produced the vaccine against polio and the research that produces the gadgets which make life more agreeable in the U.S.A. Another is that the organization and co-ordination of American military research has been less effective than that of the Russians.

The discussion might be closed at this point, were it not for the fact that a number of people

are saying loudly and repeatedly that the Russian school system, with its greater emphasis on science and mathematics, is somehow *better* than the American system. Many of these critics have long been criticizing the American school system as being too easy on children, as lacking in the sterner virtues, and they are simply using the current concern about Russian satellite and military research as a convenient means of influencing people to blame the schools. However, other people are honestly perplexed by what they read about Russia's schools, and they wonder whether the Russian methods may not be better. For people who want to understand the true differences between Russian and American primary and secondary education and then to decide what is good or bad about these systems, it is first necessary to clear up some misunderstandings caused by inadequate reports on Russian education.

It has been said, for example, that all school pupils in Russsia get five or six years of physics four or five years of chemistry, and 10 years of mathematics. This statement conveys a completely false impression to the American who is not familiar with the European secondary school curriculum.

The Russian secondary school, like other European schools, puts the pupil into some 30 to 33 hours of classes a week, in contrast to the American secondary school which assigns pupils to 22 to 27 hours of classes. The Russian pupil studies 10 or 12 different subjects in a given semester, but his time on these studies varies from one hour per week to six hours per week. Thus, although the Russian pupil studies what is called "physics" for five years, he takes two hours a week the first year, three hours the next two years, and four hours the final two years for a total of 16 hours per week if all were crowded into one year.

The first- and second-year work, which comes at ages 13 and 14, is very similar to what an American pupil gets in "general science" at that age level and would not be called "physics" in American schools. This leaves a total of 11 hours of physics taken in the last three years of the Soviet secondary school. The American pupil takes physics from five to eight hours a week for one year, which means that he spends a half to two-thirds as much time on physics as the Russian pupil. (But many American pupils do not elect to take physics, while all Russian pupils must do so.) This is the appropriate way to compare the two programs, and it conveys a different meaning than to say that "the Russian pupil gets five years of physics while the American gets one year."

In general, the Russian pupil devotes about twice as much school time to science as his American contemporary who takes courses in both physics and chemistry. The Russian pupil spends about the same amount of time on mathematics as the American pupil who elects to take four years of high-school mathematics.

This leads to another difference between the Russian and American secondary schools. The Russian school selects the ablest youth, or aims to do so. Until about 1952, no more than 15% of Russian youth entered the final three-year unit of the secondary school at about age 15. This was in contrast to about 90% of American youth in secondary school at that age. Since 1952 the Russian secondary school has been enlarged to accept about 50% of youth at age 15. This means that many Russian pupils of average ability are now following a program constructed for high-ability students; and already some difficulties are developing in the Russian schools. Some 30% of Russian youth are now graduating from secondary school, while those who fail to do satisfactory work are being shunted off into schools which give a more limited technical training.

Thus, the American secondary school, which graduates 62% of the youth aged 17 or 18, is quite different in composition from the Russian general secondary school, which graduates some 30% of youth. The Russian secondary school program, if it is good for young people who are going to the university and into scientific work, may not be good for American young people, many of whom will not go to a university and few of whom will go into scientific work.

A further question has been raised about the goodness of the Russian school program, even for able pupils who intend to go into science or engineering. Some American educators believe that the Russians overemphasize science and mathematics in the secondary school—that they "over-teach" it. They feel that the Russians try to teach science too early, before pupils are mature enough to comprehend it. According to this view, a student may learn physics faster and better at age 16 or 17 than if he is forced into it at 14 or 15, when his experience and his mind are not mature enough for certain abstract concepts.

For example, at the Thomas Alva Edison Foundation Conference on "Strengthening Science Education for Youth and Industry" (1956) Prof. John Turkevich of the chemistry department of Princeton University said,

I frankly do not care how much science the boy knows when he comes to my freshman class. I expect a certain amount of intellectual maturity, but I think one of the very weaknesses of the Soviet system is this insistence on a tremendous amount of factual material. I would never recommend more than one year of chemistry at the high school level. I would not recommend more than three years of mathematics at that level. More than this just stifles because they are not mature enough at that age to appreciate the fine points.

Some of the people at this conference disagreed with Dr. Turkevich, and others agreed. But most American scientists would question the value of putting as much emphasis on science in the secondary school as the Russians do. There is no evidence that the American university graduate in science is inferior to the Russian graduate, though the Russian has been exposed to more school hours of science than the American.

In any case, a good many Americans will ask: Why hurry with the education of our youth if they are busy and growing with what they get under present conditions? We live longer than we did a generation ago. Why try to prepare in a shorter time for a longer life? If American boys and girls grow up into competent adults with the present education, what gain is there in making life harder for them as adolescents or in hustling them through college a year younger than has been customary?

In fact, some Russians have wondered out loud whether the Soviet school program was not too much of a speed-up for the good of Soviet youth. In May 10, 1956, a group of leading Soviet medical authorities published a long letter in the *Literaturnaya Gazeta* charging Soviet educational authorities with endangering the health of school children by overloading them with lessons and homework. They said, "Chronic overexhaustion, frequent headaches, weakened memory and vision, proneness to infectious diseases with various complications, result in a general weakening of the child's organism." They wrote of the "unbelievable over-burdening" of school children. Children of 11 to 13 work an average of eight to 10 hours a day (including homework); children of 14 to 17 work 10 to 12 hours. The majority of the upper forms of secondary schools not only have no time left for reading, sport, theater, or amusement, but so little time is left even for sleep that an industrious pupil becomes irreparably exhausted mentally.

The following September the Russian Minister of Education ordered the abolition of end-of-year examinations in all classes but the seventh and 10th, where the examinations are necessary for promotion to other schools. This will lessen the nervous strain and the burden of work toward the end of the school year, though it does not decrease the daily amount of work which has to be accomplished during most of the school year.

This is not to suggest that we should close our eyes to what is going on in Russia and other European schools. No doubt we can learn from them, and they can learn from us. There are several things about Russian education that we might well ponder. For example, there are as many girls as boys in Russian universities, while the ratio of boys to girls in American universities is 60-40. Russia gives more opportunity to women in the scientific professions, *e.g.*, 75% of Russian physicians and 25% of Russian engineers are women.

Although the Russian school program is clearly not the program which most Americans will want to follow, there probably are some improvements in our educational system which can be made under the push of present needs. The present shortage of young adults, due to the low birthrates of the 1930's, rather forces us to get all the trained talent we possibly can from the youth in our secondary schools and colleges. We might do the following things:

1. Help more of the ablest quarter of students to enter and complete a college course. At present two-thirds of the ablest quarter of youth go to college. To improve this record we would have to find ways of stimulating the present nonmotivated youth to want a college education. And, having found ways of motivating more able youth for college, we would need to provide scholarship assistance for most of them.

2. Encourage more able students to go into science and mathematics. However, the publicity of the last few years already has dramatized effectively the need for, and the rewards of, scientists and engineers. The majority of winners in recent national scholarship competitions have chosen these areas of work.

3. Teach physics and chemistry more professionally to the abler students in the last two years of high school so that college courses can be built upon the high-school courses. This means that physics and chemistry courses in high school should be different for students of average ability than for high ability students interested in science careers.

4. Teach mathematics more effectively to high-school students who are interested in scientific careers. But there is no point to requiring *all* high-school students to take more mathematics. Few of those who now take little or no math-

ematics would ever become scientists, and forcing them to take more mathematics would only worsen the present shortage of mathematics teachers.

5. Pay teachers better, and use this and other methods to recruit young people into the teaching profession.

The All-Year School, Pro and Con

By WILLIAM J. FITZPATRICK
Seton Hall University, South Orange, N. J.

IN AN Associated Press dispatch of Nov. 19, 1957, Edgar Fuller, executive secretary, Council of Chief State School Officers, identified the U.S. Chamber of Commerce as one group which he said is pushing the idea of the "all-year school." The general plan of the all-year school is to divide the school year into four quarters. Students must attend at least three quarters to receive credit for one school year. Some students also may elect to attend a fourth quarter in order to advance their grade standing.

The affirmative position on the question of this article is defended on the basis that present remedial programs in summer schools are catering to the slow or indifferent pupil with no consideration for the gifted and proficient. The advantages of the all-year school on the quarter plan as cited by its advocates are as follows: children are eager to study in the summer time; their minds and bodies are not adversely affected by such study; the time gained by these pupils would mean a financial gain to the city because they would be able to finish their courses in a shorter time; the school plant should not be idle three months of the year; each individual has his God-given right to advance as rapidly as he can and not be bound down with the dull or the lazy; the summer work is on a par with that offered during the regular school year; the all-year school increases school capacity, raises the pay of teachers, and entails no heating expenses; a child that has been absent can make up for lost school time; parents may take children on a winter vacation; and senior students may seek profitable employment during the winter months.

Despite the above advantages, all-year schools on the quarter plan have been unsuccessful. They have been discontinued wherever they have been tried. All-year schools were operated in Albuquerque, N. M.; Amarillo, Tex.; Ardmore, Okla.; Bluffton, Ind.; Eveleth, Minn.; Gary, Ind.; Mason City, Iowa; Newark, N. J.; Omaha, Neb.; Tulsa, Okla.; and Nashville, Tenn. The plan was tried on a limited and a comprehensive scale and for a short period and a long period of time. It was unsuccessful in every case.

Here are some of the objections to the all-year school by authorities where such schools have been maintained and by survey committees that recently have studied the plan: the total cost of operating the all-year school is greater than the cost of operating a 10-month school; there would be no time for school maintenance; equalized enrollments, balanced staff, functional curriculum, and athletics are some of the administrative problems; truancy increases; summer study is more difficult; all-year school disrupts home life; a new group of students every three months would mean a multiple class situation for every teacher and thus impair the instruction program; it would require a minimum of 21 teachers in a seven-grade elementary school to achieve a fully graded classroom situation under the quarter system, with each teacher having pupils of comparable age and grade placement; there would be protests from parents, who were obliged to send their children to the summer quarter, particularly if not all their children had vacations during the same quarter; and it would be difficult to have schools in which the number of pupils could be divided by four and the number of classrooms divided by three.

Some of the above objections were formulated in 1952 by the San Mateo County (Calif.) Committee, which decided not to recommend the all-year school. Another study conducted in the same year by the Educational Research Service of the American Association of School Administrators found no cities operating all-year schools. As recently as Aug., 1954, the superintendent of schools in Milwaukee undertook to investigate the possibility of the all-year plan.[1] The conclusion of his report was that no satisfactory solution has been developed to overcome the criticism of the plan.

[1] A report on actual school programs and a bibliography on the all-year school may be found in W. J. Fitzpatrick, "A History of Summer Schools in the United States from 1900 to 1953," unpublished Ph.D. thesis, New York University, 1956.

In July, 1954, the Los Angeles City School Districts issued a lengthy report on all-year schools. One of the most significant contributions of this survey was the school calendar formulated for a possible all-year school. Actually, three alternate calendars were devised, one of which divided the school year into thirds. However, the latter was considered unfeasible as it would not comply with California State Law as it existed. The findings of this report once more attested to the fact that financial saving is questionable. At no level would more than one-eighth of the pupils benefit from the program.

Is the all-year school the solution to lack of school facilities, low teacher salaries, and advanced progress for the gifted students? There are other solutions. The "year-round school with enriched program" is becoming popular throughout the United States. The year-round school has the advantage of enriching the learning experience of the gifted, average, and slow student, in addition to full utilization of school plant and higher teacher salaries. Some colleges have been accepting 16-year-old pupils from the secondary school who display a high degree of accomplishment. In contrast, the all-year school tends to shorten the school year for most pupils and weakens the educational program.

Three Centuries of Comenius' Contributions to Education

By WILLIAM W. BRICKMAN
School of Education, New York University

If two centuries had to elapse before the educational world gave due recognition to the pedagogical genius of Jan Amos Komensky (Comenius), at least the last century has not done too badly in making public his contributions to education. One thinks of the numerous editions and translations of his various writings, the Comenius-Gesellschaft in Germany, the emphasis on his methods and ideas in the textbooks on educational history and theory, and the countless monographs in many tongues on the different aspects of his work and influence. "That incomparable Moravian," as Cotton Mather referred to him, has rightfully been acclaimed in recent decades as the "teacher of nations" and as the ideological forerunner and inspirer of modern efforts at international cultural and educational co-operation.

It was hardly a surprise, therefore, when the General Conference of Unesco resolved unanimously at New Delhi, India, during its ninth session in Nov.-Dec., 1956, to celebrate the tercentenary of the publication of the collected edition of the didactic works of Comenius (1592-1670). The resolution was as follows:

The General Conference

1. *Considering* that John Amos Comenius was one of the first men to propagate the ideas which Unesco took for its guidance at the time of its establishment,
2. *Considering* that, in attributing to education an important role in the improvement of man's lot and the civilizing of human society, he was the originator of universal schooling and adult education,
3. *Considering* that he was the advocate of the idea of collaboration and peaceful organization among all the peoples of the world,
4. *Considering* that he was, accordingly, one of the authorities to whom the United Nations referred at the time of its foundation,
5. *Considering* that 1957 will mark the completion of 300 years since that important event, the beginning of the publication of the complete works of John Amos Comenius, in the Netherlands in 1657,
6. *Requests* the Director-General to take measures to commemorate the 300th anniversary of the publication of Comenius' *Opera Didactica Omnia* at Amsterdam in 1657 and to arrange for the publication of *Miscellanies* of selections from his works.

Among the measures taken by Unesco to celebrate this event were an article in the *Unesco Chronicle* (July, 1957) by Prof. Giovanni Calò of the University of Florence, "Homage to Comenius"; a brief description of the Comenius Museum at Uhersky Brod, Czechoslovakia, in its quarterly, *Museum* (X, No. 2, 1957); an article by Marie-Madeleine Rabecq, curator of the Musée Pédagogique of Paris, on "Comenius: Apostle of Modern Education and of World Understanding," an editorial on the "Spiritual Ancestor of Unesco" by Assistant Director-General Jean Thomas, and several Comenian illustrations in the *Unesco Courier* (Nov., 1957).

The major contribution of Unesco to the tercentenary was the volume, "John Amos Comenius, 1592-1670: Selections" (Paris: Unesco, 1957; New York: Columbia University Press, $3.25), with another edition in French. This 183-page book contains a philosophical and biographical essay, "The Significance of John Amos Comenius at the Present Time," by Jean Piaget, director, International Bureau of Education, as an introduction. The selections are from "The Labyrinth

Unesco Courier

From the collected didactic works of Jan Amos Comenius, issued in 1657

of the World and the Paradise of the Heart," "The Great Didactic," "The Pampaedia," and "The Panorthosia." The editorial apparatus includes notes and bibliographical lists in several languages by Prof. Otokar Chlup of the Czechoslovak Academy of Sciences and Dr. Jan Patočka of the University of Prague. It is a handsome little publication and useful to students, but one wishes that the budget of Unesco had permitted it to publish more than the brief extracts.

Unesco also has announced that it would release in the spring of 1958 a filmstrip on the life, work, times, and impact of Comenius. Such a visual aid should prove helpful to instructors of educational history and theory, as well as to public lecturers on the issues of education.

The native land of Comenius, naturally enough, has issued many publications preceding and during the *Annus Comenianus, e.g.*, "Praeceptor Gentium" (1955) and "Scholarium Reformator Pansophicus" (1956), Latin texts and Czech translations of various smaller works. The Czechoslovak Academy of Sciences devoted an entire issue of its scholarly educational periodical, *Pedagogika* (VII, 2, 1957), to the great educator. The academy also inaugurated in 1957 a new journal, *Acta Comeniana,* under the editorship of Prof. Chlup, to publish in several languages the results of Comenian research by

Czech and foreign scholars. The two issues examined by the writer contain articles in Czech, German, and English by an international authorship, with summaries in Russian, German, and English.

Finally, the academy reprinted in facsimile the three beautiful volumes, "J. A. Comenii Opera didactica omnia," which had been published in Amsterdam by Laurentius de Geer in 1657. Issued in the anniversary year, this work is a fitting literary climax to all the efforts to commemorate the ideas and influence of Comenius. It is to be hoped that American universities will obtain copies of this essential source of the educational wisdom of the past for their libraries. The introduction is in Czech, Latin, Russian, French, German, and Spanish. The first two volumes reprint the didactic works of Comenius, while the third volume presents a prefatory essay in Czech and Latin which is followed by notes in Latin by various Czech scholars. The three folio-size volumes, which contain 2,281 pages, were prepared under the editorial supervision of Prof. Chlup.

The writer, during his visit to Prague, in Jan., 1958, visited a commemorative exhibit of Comenius' works and writings about him in the Waldstein Palace. Those who cannot see this highly instructive collection may become acquainted with its content by consulting the catalogue, "J. A. Komenského: Zivot, Dilo a Doba" (Prague: Státní Pedagogické Nakladatelstvi, 1957). The Comenius scholar and the specialist in the history of education can profit from this listing of works by and about the master.

It is unfortunate that pedagogical journals in the United States did not mark this Comenian anniversary. The *Education Index* for 1957 and for early 1958 does not list a single article on one of the truly greatest educators of all time. Although SCHOOL AND SOCIETY did not publish anything about the celebration until Jan. of 1958, it can at least be said that the editor planned an article, but preferred to wait until he had an opportunity of examining the European materials and visiting Prague. All this took time, and the present essay is an attempt to rectify the omission.

Perhaps the recent neglect of Comenius by the American pedagogical profession may be attributed not so much to a policy of willful isolationism as to a lack of alertness with respect to foreign educational developments and writings. If more educators would go to the trouble of learning to read two or three foreign languages, the entire profession would be enabled to enlarge its educational horizons.

In 1658 there appeared in Nürnberg the first edition of Comenius' "Orbis sensualium pictus," possibly one of the most successful textbooks in history. In view of the fact that this illustrated book exerted a profound influence on educational work all over the world, it is only fitting that some recognition be given by American educators to its tercentennial anniversary. Schools of education, teachers colleges, and school systems might well arrange exhibits and symposia on Comenius, his ideas, work, and impact on world education. Educational journals should not let the opportunity of celebrating the anniversary of Comenius slip by a second time.

SPECIAL CONFERENCE REPORTS

Creative Potential of College Youth

"BREAKING THE THOUGHT BARRIER which keeps our young people from realizing their creative potentiality" was the major theme of the annual conference held by the Academic Council of the Western Personnel Institute in Pasadena, Calif., Nov. 12-13, 1957. Deans of students, deans of faculty and instruction, and managers of counseling bureaus of 25 of the institute's 30 member colleges and universities shared with the institute staff in creating a good climate for free discussion and the exchange of stimulating thoughts.

Samuel B. Gould, president, Antioch College, spoke of the importance of "letting the mind range freely, breaking out of the traditional circumference with which experience and education encircle it." If America is "to match the Russian dedication to the supremacy of the state with at least an equal dedication to the enhancement of the dignity of the individual," Dr. Gould continued, it must take advantage of the opportunities for leadership in an area for which Americans are peculiarly suited by heritage, tradition, and character: that of the "free and inquiring mind, the area which offers free play of creative genius not merely in science, but in matters of the soul." Dr. Gould felt that

the efforts of men in science to think in new dimensions has given a clue to the direction in which all men in education, especially in the humanities, should be following, "for the procedures of problem solving are amazingly similar, regardless of the type of problem." However, in *enabling* students to acquire valuable techniques, education "does not often enough concern itself with the development of the mind as an active and creative instrument, *ennobling* to the individual and to the civilization of which he is a part." The next morning, therefore, Dr. Gould led the discussion about practical ways of achieving in the college this encouragement of students to develop creativity.

Another session centered on "Changing Values in College," a study of the impact of college teaching on student values by Philip E. Jacob. Paul J. Braisted, president of the Edward W. Hazen Foundation which sponsored this study, gave the background for it and commented on the types of questions which this report has raised in the minds of educators. Discussion brought to a focus the need for each college to study itself more thoroughly in an effort to initiate a better curriculum and student personnel program. Members of the conference expressed a concern that students can be controlled. The question of who is to set the framework is of importance if a student can be reached and his values can change. The question also was raised as to how to get students to reappraise their own values during their college experience.

E. Wilson Lyon, president of Pomona College and chairman of the American Council on Education's Commission on the College Student, spoke on the accomplishments and plans of that commission. Harold L. Enarson, executive director, Western Interstate Commission on Higher Education, told of current studies and of progress in interstate educational exchanges in high cost professional fields.

H. Donald Winbigler, dean of students, Stanford University, was elected to succeed D. D. Feder as chairman of the Academic Council and Willard W. Blaesser, dean of students, University of Utah, was elected vice-chairman.

H. Donald Winbigler
Dean of Students
Stanford University

Conference on Mathematics Training and Research

A Conference on Training and Research Potential in Mathematics was held at the University of Chicago on Feb. 20-21, 1958, under the sponsorship of the National Science Foundation. The conference was called by its chairman, Prof. A. Adrian Albert, University of Chicago (chairman of the Survey on Training and Research Potential in Mathematics) to consider problems in mathematical education at all levels. It was attended by the following 15 departmental chairmen: Saunders MacLane (Chicago), L. H. Loomis (Harvard), W. T. Martin (M.I.T.), G. A. Hedlund (Yale), Samuel Eilenberg (Columbia), W. L. Chow (Johns Hopkins), J. W. T. Youngs (Indiana), S. C. Kleene (Wisconsin), A. D. Wallace (Tulane), F. E. Ulrich (Rice), John Gergen (Duke), M. R. Hestenes (UCLA), H. F. Bohnenblust (Calif. Tech.), Halsey Royden (acting, Stanford), and C. B. Morrey (acting, California at Berkeley).

At the first session, Prof. Albert presented a summary of the extent of the present Federal support for research in mathematics. A discussion followed concerning the nature and desirability of block grants to departments of mathematics, the support of the predoctoral program in mathematics including the program leading towards a terminal master's degree, and the position of pure mathematics within the other sciences. There was a discussion of the question of whether new centers for advanced study in mathematics should be established with the use of Federal funds, or whether it would be wiser to use such funds, and new funds which may become available, to strengthen existing strong departments. A number of resolutions on these subjects were phrased and discussed, and revised versions were approved at the Feb. 21 session.

The main business of the session of Feb. 21 was the very important problem of the means by which research mathematicians might exert leadership in an attempt to improve the teaching of mathematics in the elementary and the secondary schools. Several members of the group made the point that this was urgent, that the professional mathematician had not been interested in solving the educational problem caused by the lack of subject-matter training for a majority of our teachers, and that it was time that mathematicians made it their business to

help in the preparation of suitable materials for the teaching of mathematics on all levels. At the close of the conference a resolution on school mathematics was passed. The set of resolutions, as transmitted to the director of the National Science Foundation follows:

Resolution 1: The growth of Mathematics in our society requires new programs and new ideas. This conference, in considering and proposing such new programs, recognizes the obligation to explain the background and purposes of these programs to the officials of the National Science Foundation, to the other agencies engaged in supporting scientific research, and to the public at large.

Resolution 2: The conference recommends the use by government agencies of block grants in addition to research grants to individuals or small groups of mathematicians. By a block grant is meant an award to a Department of Mathematics on the basis of a specific proposal from that department as to the planned use of the funds. Block grants should usually be made for a substantial period of time, such as five years. In particular, the conference recommends that such grants might appropriately include the following items:

(a) Funds for the support of predoctoral graduate students;

(b) Funds for the support on a transient basis of postdoctoral mathematicians at all levels, including both young Ph.D's and older mathematicians.

It is the conviction of the conference that the funds of block grants should not be used for recruiting purposes. We regard basic salaries of regular members of the staff as the responsibility of the University.

Resolution 3: The conference observes that financial help for graduate students in Mathematics intending to enter a college teaching career is of fundamental importance. The conference recommends to the Division of Scientific Personnel and Education of the National Science Foundation that there be instituted a broad program of support for such students, it being recognized that many of them terminate their education with a suitable master's degree.

Resolution 4: Resolved: That as the prime order of business in the next 2 to 5 years this conference favors the strengthening of as many Departments of Mathematics as feasible by a broad, new program of block grants.

Resolution 5: Resolved: That this conference expresses its gratitude to and confidence in the National Science Foundation for the fine program of postdoctoral training already started and suggests that this program be further extended.

Resolution 6: This conference wishes to go on record as approving the principle that no separation between pure and applied mathematics should be recognized in the work of the National Science Foundation. In particular, it believes that, in the field of Mathematics, advisors should be recruited from all branches of Mathematics.

Resolution 7: Resolved: That these resolutions be transmitted to the National Science Foundation with the request that the Foundation ask the National Research Council, through its Divisions of Mathematics, to appoint a small committee to discuss the implementation of these resolutions and to report back to the National Science Foundation.

Resolution 8: The conference requests that Dr. A. T. Waterman transmit a copy of these resolutions to Dr. James R. Killian, if Dr. Waterman deems this action appropriate.

RESOLUTION ON SCHOOL MATHEMATICS: This conference recognizes the fundamental importance of need for revision in the Mathematics curriculum at the elementary and secondary school levels. This conference expresses its deep interest in this matter in its various aspects including mathematical content, textbooks and other teaching materials, and training of present and future teachers. This conference further recognizes the importance of this matter to mathematics and to the nation as a whole.

The conference requests the President of the American Mathematical Society, in consultation with the Presidents of the Mathematical Association of America and the National Council of Teachers of Mathematics, to appoint a committee of mathematical scholars who, after due deliberation, would attempt to negotiate with suitable groups (within Universities or present or new non-profit corporations) which would seek funds from suitable sources and proceed toward a solution of the problem described above. This joint committee should also recommend to the groups a form of mathematical advisory committee which the groups might use.

A. ADRIAN ALBERT

University of Chicago

RECENT *Publications*

The following are 1958 editions, except where indicated otherwise

BARNET, SYLVAN, *et al.* (editors). *Eight Great Comedies.* Pp. 469. New American Library, New York 22. 50 cents (paper).

BROWN, EVELYN M. *Educating Eve.* Pp. 186. Palm Publishers. Westmount, Montreal, P. Q. 1957. $3.50.

BROWN, KENNETH E., and ELLSWORTH S. OBOURN, *Offerings and Enrollments in Science and Mathematics in Public High Schools, 1956,* pp. 44, 25 cents (paper); MACKIE, ROMAINE P., *et al., Teachers of Children Who are Socially and Emotionally Maladjusted: A Report Based on Findings from the Study "Qualification and Preparation of Teachers of Exceptional Children,"* pp. 92, 1957, 45 cents (paper). U. S. Government Printing Office, Washington 25, D. C.

BROWNING, BRUCE., and HENRY J. OTTO. *Organization for Instructional Supervision in Elementary Schools.* Pp. 87. College of Education, University of Texas, Austin. 1957.

CAUSEY, OSCAR S. (editor), *The Reading Teacher's Reader,* pp. 339, $5.00; MEHL, MARIE A., *et al., Teaching in Elementary School,* second edition, pp. 518, $5.75; NEUMEYER, MARTIN H., and ESTHER S. NEUMEYER, *Leisure and Recreation:*

(Continued on page 206)

Scholastic Aptitude Test Scores of SEB Member Schools

By JOHN F. GUMMERE
Headmaster, William Penn Charter School, Philadelphia

THE FOLLOWING STUDY of Scholastic Aptitude Test (SAT) scores made by member schools of the Secondary Education Board (SEB) shows them to be far above the mean scores for "independent" schools reported by the College Entrance Examination Board (CEEB).

The CEEB at present classifies as "independent" any school which is not tax supported. But the SEB and its member schools class as "independent" the kind of school which I shall call the "standard" independent school. By this we mean a school which aims entirely at post-secondary education, almost all of whose graduates (over 95%) go on to such advanced education, which is accredited, which is incorporated not for profit, which in most instances is not religiously affiliated, and which can satisfy the Executive Committee of the SEB as to its stability, proper management, and educational philosophy.

In its membership the SEB includes a very wide variety of such "standard" schools: boys', girls', coeducational, boarding, day, boarding-and-day, large and small, urban, suburban. About two-thirds are primarily day schools; one-third are primarily boarding schools. Geographically the membership runs from Punahou, the largest of our members, in Hawaii (2,800 students, co-ed, boarding, day) to the American Community School of Paris (326 students, co-ed, day). It includes schools in Costa Rica, Canada, Cuba, Puerto Rico. In the continental United States there are members in 34 states, including Hebron Academy in Maine (191 boys, boarding) to the Webb School in Claremont, Calif. (163 boys, boarding, day); from Shattuck, in Faribault, Minn. (274 boys, boarding) to St. John's in Houston, Tex. (639 boys and girls, day); from Annie Wright Seminary in Tacoma, Wash. (307 boarding and day, girls, co-ed in lower grades) to Ransom School in Coconut Grove, Fla. (101 boys, boarding, day).

To find out what scores were being made on the SAT by pupils in this very diverse SEB membership, I sent to every member school which has a 12th grade (331 in all) a request for the median Verbal and Mathematical scores made by seniors on the SAT in either January or March in 1956 and 1957. Replies came from 201 (60%). Since plain reply cards were used with a business-reply envelope, there was no way of identifying a school. Thus, no school had need to withhold scores if it thought they were "low." The large sampling of schools, the range of the size of classes (from one to 236) and of median scores (from 356 to 714), and the number of cases reported (7,802 for 1956, 8,097 for 1957) point toward valid results.

Yet, before any statistics are given, it is very important to note that in many of these schools every member of the senior class takes the SAT; in most others, almost all seniors take it. Thus, we are dealing with the scores of a very high percentage of the senior-class population of these schools, not simply with those made by a selected group who happen to be aiming at colleges which require the SAT.

TABLE 1
Median Scores of Final Candidates from SEB Member Schools on the January and March SAT

1956	Year	1957
197	SCHOOLS REPORTING	201
34	MEDIAN SIZE OF GROUP	34
40	AVERAGE SIZE OF GROUP	40
2-236	RANGE IN SIZE OF GROUP	1-212

VERBAL	MATHEMATICAL	SAT MEDIAN SCORES	VERBAL	MATHEMATICAL
664	667	.... Highest	650	714
559	571	..... Q_3	557	579
526	525	.... Median	525	534
494	473	..... Q_1	493	483
356	382	.... Lowest	373	360
529	536	Weighted means of medians	528	543
7,802 cases				8,097 cases

It is clear that the "standard" independent school, which we venture to say is typical of the forward-looking, prospering, academically oriented independent school of today, has a record of SAT scores which is far different from

what might easily be supposed if one were to judge merely from the CEEB tabulations.

Table 2 compares the weighted mean of medians of the SEB schools with the mean scores reported by the CEEB for "independent" schools for the two years involved.[1]

TABLE 2
Mean SAT Scores for Final Candidates from "Independent" Schools as Reported by the CEEB

1956		YEAR	1957	
VERBAL	MATHE-MATICAL		VERBAL	MATHE-MATICAL
491	503	.. JANUARY ..	491	502
466	480	.... MARCH	448	473
Weighted Mean of Median Scores Made in the Same Two Years by Final Candidates from SEB Member Schools				
529	536		525	534

Erroneous conclusions have been drawn from the CEEB statistics; such statistics have been used in a number of articles in an effort to show that the "independent" school student does not do any better than his public-school compeer. Well, he does do a great deal better. After all, he ought to, since he has the usual advantages of a straight academic curriculum, a selected student body, small classes, and all the other incentives and aids to learning which it is the avowed purpose of the standard independent school to furnish. But our figures are in no way intended to cast any reflection on public-school scores; they are simply intended to clarify a point which greatly needs clarification.

One can hope that in the future the results of this study will be kept in mind if judgment is passed on SEB member schools and on others just like them. One also can hope that the CEEB, which should not be blamed for the way it has classified scores in the past (since it had no better way at the time), will revise its tabulations so as to give a better picture of the SAT scores of the standard independent school.

[1] A comparison of a mean with the weighted mean of a large number of medians is valid enough for our purposes.

Speaker Effectiveness and the Brown-Carlson Listening Test[1]

By JOHN A. HABERLAND
University of Arizona

During the past few years, many articles stressing a need for the teaching of listening have appeared in various journals. Most of these pointed out the lack of such instruction. A few articles have given techniques for teaching this important skill. Very few have been devoted to the actual evaluation of achievement in listening.

To measure improvement in a skill, one must evaluate growth in the skill. Furthermore, evaluation instruments may be used to check techniques of instruction. One of the tests purporting to measure listening ability is the Brown-Carlson Listening Comprehension Test.

The authors state that the test "is meant [to measure] the aural assimilation of spoken symbols in a face-to-face speaker-audience situation with both oral and visual cues present."[2] Thus, by definition, the test must be administered "live"; it can not be administered via recording.

Individual differences are present among test administrators. If one administrator is a more effective speaker than another, then this factor might influence scores made by the test subjects. Beighley[3] reports that vocally skilled speakers helped listeners to achieve higher scores on a listening test.

The purpose of this investigation was to determine if speaker effectiveness significantly influences scores on the Brown-Carlson Listening Comprehension Test. The subjects were students enrolled in General Psychology classes at Colorado State College of Education during 1956-57. The majority were freshmen. A total of 65 students was tested (27 women and 39 men).

The "effective" speaker was a graduate student trained in test administration with special training in speech. The "ineffective" speaker was a graduate student with equal training in test administration but with no speech training. The effective speaker administered Form Am of the test; the ineffective speaker administered Form Bm. To control the influence of practice on test

[1] Appreciation is expressed to Ralph Webb and Darrel Burger, who served as the "effective" speaker and the "ineffective" speaker, respectively.

[2] J. I. Brown and R. G. Carlson, *Brown-Carlson Listening Comprehension Test* (New York: World Book Co., 1953), p. 1.

[3] K. C. Beighley, *Speech Monographs*, 19:249-258, 1952.

scores, a period of four weeks was observed between the administrations.

TABLE 1
Comparison of Raw Scores

Group	N	Critical Ratio	Level of Significance
Total	65	.18576	None
Women (Form Am)	27	4.0289	.01%
Men (Form Am)	39		
Women (Form Bm)	27	2.5922	.02%
Men (Form Bm)	39		

The critical ratio of .18576 is not significant. In this study, speaker effectiveness did not significantly influence total tests scores. A check was made of the difference between the scores of the two forms for Section E, Lecture Comprehension. When only this section was considered, the scores on Form Am were significantly higher than the scores attained on Form Bm. However, since only a small sample of the total group was considered, no conclusions should be drawn. Interestingly, on both Form Am and Form Bm the women made significantly higher scores than the men.

In this study, effectiveness of the speaker did not appear to influence the reliability of the test. Women scored significantly higher than men on both forms of the test irrespective of the speaker. This is contrary to findings reported by other investigators who reveal a superiority of men over women.[4]

On Section E, Lecture Comprehension, it appeared that the vocally trained person aided students in obtaining higher scores. A further study of this section should be made on a more adequate sample to determine if this tentative finding is supported.

[4] J. Caffrey, *Education*, 75:303-310, 1955; and C. Dow, *Speech Monographs*, 20:120, 1953.

EVENTS

A Decade of International Educational Exchange

The Smith-Mundt Act, or, as it is officially called, the U. S. Information and Educational Exchange Act of 1948, is now 10 years old. What has been achieved under its auspices is impressive: 36,000 persons from over 80 countries came to the U. S., while 14,000 Americans were enabled to do educational work abroad. Among the foreign visitors were 24,000 graduate students and 10,000 specialists and leaders who studied or received training in this country. Some 6,000 American teachers, 7,000 professors, and 1,000 adolescents visited various foreign nations for cultural and educational purposes.

Like the Fulbright Act, which is far better known, the Smith-Mundt Act has promoted the ideals of international understanding. The modest investment by the U. S. Government has undoubtedly yielded dividends which are out of proportion to the initial cost. Foreign students and scholars—opinion-molders in their respective countries—have seen the *Homo Americanus*, for better or for worse, in his natural habitat. The available reports of their experiences in the U. S. indicate that they observed both the bright and the dark sides of American life and culture, and that they obtained an unstereotyped impression of this nation. It is to be hoped, and it is far from improbable, that the 36,000 foreigners would do something toward correcting the mistaken notions of the U. S. which prevail all over the world.

Careful selection of American students and scholars also will go a long way toward achieving a similar objective. It is necessary for Europeans, Africans, Asians, and others to meet cultural and intellectual Americans and to exchange knowledge and views. Increased contacts of this type will bring about greater respect abroad for America's cultural and educational achievements. We need to impress other nations more with our spiritual, rather than with our traditionally material, resources.

Another value of the Smith-Mundt program is to make it possible for more Americans, who may not have an opportunity for foreign travel, to become better acquainted with the human products of diverse cultures. Those who get to meet Indonesian, Liberian, Peruvian, or Belgian students and scholars will certainly add to their appreciation of other nations' ways of life, as well as direct knowledge of significance.

As of 1958, some 50,000 individuals have been involved in the benefits of the Smith-Mundt Act. Good as this decade has been for educational exchange of this type, it represents but a droplet in the barrel. The U. S. Government should be encouraged to expand its facilities for bringing to these shores a greater number and variety of foreign nationals and to send abroad more Americans to study and teach. Such person-to-person contacts can make more lasting contributions to international understanding than radio programs and leaflets. Let the accent be placed where it belongs.—W. W. B.

TEACHING IN THE FUTURE

SCIENTIFIC TALENT for the Space Age is not going to be produced in science classes of the type conducted in most high schools today, said Prof. J. Lloyd Trump, University of Illinois College of Education, to the annual convention of the National Association of Secondary School Principals, Indianapolis, Feb. 15.

He predicted schools of the future in which individual study will be encouraged and teachers will have time for conferences with students in small groups. This will be accomplished by abandoning the idea of 25-35 students as the "ideal" class size and by relieving teachers of duties which can be handled by semi-professional staff.

He outlined a high-school instructional staff which would include professional teachers with advanced training, teaching assistants trained for specific duties, clerks, general aides for non-teaching assignments, community consultants on a volunteer basis, and professional staff specialists in such areas as guidance, health, aid to exceptional children, audio-visual materials, and curriculum development who might serve several schools.

Trump estimated that a high school with an enrollment of 800 students organized on this basis could reduce its expenses by $14,500—enough to raise the salaries of the professional teachers required by nearly 15%.

In Prof. Trump's view, about 40% of instruction can be given in classes of 100 or more students, 35% through study by the individual working by himself or with not more than one or two others, and 25% from discussion in groups of 12 or more students.

PREPARING MORE ENGINEERING TEACHERS

A PLAN to increase the number of young teachers for engineering schools of the United States has been presented to Dr. James R. Killian, Jr., the President's Special Assistant for Science and Technology, by the American Society for Engineering Education. To encourage more good students to enter graduate study, the period during which most engineering students discover their interest in a teaching career, the ASEE states that basic research in engineering must be expanded and that Federal agencies supporting basic research in engineering should greatly enlarge both the number and the amount of the grants. The increased amounts adequately should cover the true costs, including the portion of the faculty salaries required to direct the projects. The contracts also should be for longer periods of time, such as five years, and should provide means for the construction or enlargement of the buildings required.

The four-point plan:

1. A substantial increase in the number of National Science Foundation fellowships for first-year graduate study in engineering.
2. A program of secondary grants to those who fail to qualify for full fellowships under the National Science Foundation program.
3. Supplementary Federal grants to holders of National Science Foundation fellowships who take part-time teaching assignments.
4. A new program of awards under the National Science Foundation to increase the financial aid to graduate students who combine teaching with their education and research experience.

ASEE calls particular attention to the important role of basic research in preparing engineering teachers. Federal support of basic research, the society's report states, "will determine the supply of individuals with the requisite background to educate engineers in an age when basic understanding of scientific principles must replace dependence on intuition and experience."

Until very substantial steps are taken to relieve the critical shortage of teachers, efforts to increase undergraduate enrollments are "highly questionable," says the society's Committee on the Development of Engineering Faculties. According to the committee, the U.S. faces a shortage of nearly 1,000 engineering teachers. About 9,500 new teachers will be required by 1966.

ASEE's program, says Dean William L. Everitt, University of Illinois, who drafted the society's recommendations to Dr. Killian, represents "an evolutionary but not revolutionary change in present Federal policies. It would serve to increase the critically inadequate supply of well-educated engineers, and it would provide small additional incentives for a number of these to explore teaching careers." "Resident" graduate work is emphasized by the committee because "experience has shown that students who take graduate work on a part-time basis while employed in industry are almost never attracted to academic careers." Many students who have an opportunity to teach engineering during their graduate years discover that they enjoy teaching and decide to make it their career. And all engineering educators agree that teaching is itself a most effective means of learning. Indeed, say the committee's recommendations to Dr. Killian, every qualified engineering graduate student should have the opportunity and even obligation of assisting in his university's teaching program.

ACLS GRANTS

GRANTS by the American Council of Learned Societies to 48 scholars in the humanities and social sciences were announced Jan. 24. The recipients of the awards come from 16 states, the District of Columbia, and Canada and are affiliated with 24 colleges and universities. The awards are in three categories: special awards, in the amount of $10,000 each, in recognition of distinguished scholarly accomplishment; grants-in-aid, with maximum amounts of $3,000, to assist the completion of important research; and postdoctoral fellowships, with maximum amounts of $7,000, for research and study by younger scholars.

The 10 recipients of special awards are Brand Blanshard (philosophy), Yale University; J. N. Douglas Bush (English literature), Harvard University; Americo Castro (Spanish literature), Princeton University and the University of Houston; William B. Dinsmoor (art and archaeology), Columbia University; Barker Fairley (German literature), University of Toronto; Arthur O. Lovejoy

(philosophy), Johns Hopkins University; George Vernadsky (Russian history), Yale University; Jacob Viner (economics), Princeton University; Walter P. Webb (American history), University of Texas; and Harry A. Wolfson (history of philosophy), Harvard University.

Grant-in-aid recipients, chosen as a result of the first of three competitions during the 1957-58 academic year, are: Willi Apel, professor, School of Music, Indiana University; L. L. Barrett, professor of Romance languages, Washington and Lee University; Margarete Bieber, associate professor of fine arts and archaeology (retired), Columbia University; Oscar Broneer, professor of classical archaeology, University of Chicago; Byrum E. Carter, professor of government, Indiana University; Rushton Coulborn, professor of history, Atlanta University; Richard M. Douglas, assistant professor of history, Amherst College; Ludwig Edelstein, professor of humanistic studies, Johns Hopkins University; Charles Norman Fifer, assistant professor of English, Stanford University; John L. Fischer, instructor and research associate, Laboratory of Human Development, Harvard University; Russell Alfred Fraser, assistant professor of English, Princeton University; Norwood Russell Hanson, professor of philosophy, Indiana University; Donald F. Lach, associate professor of history, University of Chicago; Kenneth S. Lynn, assistant professor of English, Harvard University; James A. S. McPeek, professor of English, University of Connecticut; Walter T. Pattison, professor of Romance languages, University of Minnesota; Clyde Pharr, research professor of classics (retired), University of Texas, Walter M. Simon, associate professor of history, Cornell University; Irving Singer, assistant professor of philosophy, University of Michigan; Brian Tierney, associate professor of history, Catholic University of America; and Arnold Williams, professor of English, Michigan State University.

Fellowships were awarded to the following scholars: Nan Cooke Carpenter, professor of English, Montana State University; Donald Herbert Davidson, associate professor of philosophy, Stanford University; William A. Earle, associate professor of philosophy, Northwestern University; Irvin Ehrenpreis, associate professor of English, Indiana University; Sydney Joseph Freedberg, associate professor of fine arts, Harvard University; Charles C. Gillispie, associate professor of history, Princeton University; Edmund I. Gordon, research associate, University of Pennsylvania Museum; Michael H. Jameson, associate professor of classical studies, University of Pennsylvania; Hugh McLean, assistant professor of Slavic, Harvard University; William G. Moulton, professor of linguistics, Cornell University; John Hine Mundy, associate professor of history, Columbia University; Charles Muscatine, associate professor of English and assistant dean, College of Arts and Letters, University of California (Berkeley); Philip Nochlin, assistant professor of philosophy, Vassar College; Ernest Sirluck, associate professor of English, University of Chicago; Clarence L. Ver Steeg, associate professor of history, Northwestern University; Saul S. Weinberg, professor of classical languages and archaeology, University of Missouri; and Nelson Ikon Wu, instructor, history of art, Yale University.

PROBLEMS OF RURAL SUPERINTENDENTS

RURAL SCHOOL DISTRICTS are where most serious disagreements between superintendents and boards of education occur, according to a survey made for the Illinois Citizens' Education Committee and released in Jan. The ICEC is a state-wide group with headquarters at University of Illinois.

"Apparently the board members in rural school systems are very sensitive to increases in real estate taxes to support continual increases in operating costs of schools," the survey workgroup reported. "This makes it difficult for the superintendent to deal in the areas of salaries, operating expenses, and operating policies."

Responses of 433 school superintendents in the survey showed only 37% of school board elections to be contested, indicating that citizens are not taking their full responsibility in selection and election of persons best qualified to these boards. The ICEC study shows that lack of clearly defined objectives, policies, procedures, and job descriptions also contributed to difficulties between superintendent and board.

EDUCATIONAL FACILITIES LABORATORIES

THE FORD FOUNDATION announced in Jan. an appropriation of $4,500,000 to establish the Educational Facilities Laboratories, an independent, nonprofit organization concerned with research and experimentation leading to improvements in the construction of school and college buildings. The new agency also will serve as an information clearing house. Its data on school design, building, and equipment will be available to architects, local school systems, college trustees, and others involved in the nation-wide expansion of educational facilities anticipated throughout the country in the next decade.

The appropriation from the Ford Foundation will finance the organization for the next five years. More than half of E.F.L.'s funds will be used for experimentation in the field of school construction and equipment through grants to educational institutions. They also will support several co-operating experimental centers that will serve as research laboratories and demonstrations of efficient construction and furnishing of educational facilities. The projects may be in elementary and secondary schools and colleges and universities, both public and private.

In order to be useful in the training of teachers and school administrators, co-operating experimental centers will be related in most cases to a university or teacher-training institution. Selected experimental projects will be granted research costs over and above regular construction and operational costs.

The E.F.L. will co-ordinate the efforts of industrial and educational officials, architects, designers, and others concerned with better school buildings and equipment. It will not engage in testing or approval of materials.

IMPROVING NEW YORK STATE SCHOOLS

JAMES E. ALLEN, JR., New York State Commissioner of Education, made public in Jan. a summary of the report on "Improving the Quality of Education in New York State" prepared by a group of 17 educational administrators, teachers, and citizens of the state.

The highlights of the group's recommendations are:

1. Greater flexibility in the allocation of teacher's time and school facilities to make more effective the available human and physical resources.
2. Earlier identification of the talented through intensified pupil personnel services.

3. Increased in-service education of teachers during the regular school year and summers, with special emphasis in the area of science and mathematics.

4. To provide added time and energy for instruction, teachers should be relieved of many routine duties by the use of aides and automatic devices.

5. A school year of 190 days for actual teaching, and tuition-free summer sessions for purposes of acceleration.

6. A professionally qualified science co-ordinator for every school system to supervise all levels of science instruction, with special emphasis in the elementary area.

7. The State Education Department should take the lead in organizing workshops throughout the state to accelerate the diffusion of best practices in education.

8. Greater utilization by the schools of resources now available in local industry and business. This involvement will create greater public support for education and tend to vitalize school programs.

9. The continued reorganization of school districts to attain the optimum size for the best educational program.

10. Leadership and financial support by the state to encourage educational research and experimentation.

11. Every effort, especially the provision of adequate salaries, should be made to attract the most capable persons into the teaching profession.

A RUSSIAN TECHNICAL JOURNAL IN ENGLISH

A LEADING Russian technical journal soon will be translated into English on a regular basis by the American Society of Mechanical Engineers, it was announced Feb. 17. The effort marks the first time that the engineering society has undertaken such a project. Under a $35,000 grant from the National Science Foundation, ASME will publish the bi-monthly *Journal of Applied Mathematics and Mechanics* (*Prikladnaya Matematika i Mekhanika*, usually abbreviated as *PMM*).

The society is undertaking the task of translation "in an attempt to correct the present situation in which the Russians are familiar with the content of most, if not all, of our technical publications, while only a few of theirs are translated for use by the English-speaking world." Arrangements have been made with Russian scientists to secure proof sheets of the Russian journal in advance of final printing, to permit speedier translation.

The magazine contains the latest theoretical and practical advances made by Russian scientists in mathematics, fluid dynamics, and solid state physics. Copies may be ordered, on a subscription basis, at an annual rate of $35 for the six issues, from the American Society of Mechanical Engineers, 29 West 39th St., New York 18, N. Y.

Publication begins with the first 1958 issue, of which 2,500 copies will be printed. The exact date of appearance is uncertain, because the first issue of the year has not yet appeared in Moscow. Prof. George Herrmann of Columbia University will serve as editor of the translated magazine.

Educational Ticker Tape . . .

(Continued from page 186)

14 by Melvin Calvin, professor of chemistry, University of California, and leading researcher in the field of photosynthesis, as he received the 1958 William H. Nichols Medal of the American Chemical Society's New York Section. "I would suggest that such laboratories would be a partial answer, at least, to our problem of producing the creative thinking in all areas of science which we so sorely need," he said.

The laboratories would be part of the development of our universities. Their staffs would consist of about one-third teachers and their assistants, one-third visiting scientists, and one-third graduate students.

TEACHING ABOUT THE UN

A seminar on methods of teaching about the United Nations, organized in Karachi in Jan. by the Pakistan UN Association and the World Federation of United Nations Associations, drew school teachers from Burma, Ceylon, India, Iran, Nepal, and various parts of Pakistan. Addressing the delegates at the opening ceremony, the Pakistan Minister of Education, Kamini Kumar Dutta, said that it was imperative for teachers to introduce into the school curriculum lessons on the UN and its specialized agencies. It was in the schools, he said, that the UN ideals of peace could best be inculcated. A message from Prof. Ahmed S. Bokhari, UN Under-Secretary for Public Information, emphasized the importance of making this subject a regular part of the preparation of prospective teachers. Groups such as the Karachi seminar could do much to assist educational authorities in carrying out this task (UNESCO)

NEWS IN BRIEF . . .

Oliver J. Caldwell, Assistant Commissioner for International Education, U. S. Office of Education, left the end of last month for a one-month trip to the Soviet Union. He will visit Russian schools and other educational institutions, arrange reciprocal visits of American and Russian educators, and plan an exchange of American and Russian educational materials . . . **Pres. Grayson Kirk** of Columbia University has invited the rector of Moscow University to visit here this spring. The invitation was sent in accord with the prospective joint cultural exchange recently announced by the State Department. In his letter to I. G. Petrovskii, Dr. Kirk also invited "those of your professorial colleagues who may be able to accompany you." He informed the Soviet educator that Columbia's academic year closes at the end of May and suggested that "your visit would therefore be more interesting if it could take place before that time."

New European PTA Branch: Organization of the European Congress of American Parents and Teachers as the 52nd branch of the National Congress of Parents and Teachers has been announced by Mrs. Rollin Brown, National Congress president. About 41 units make up the new branch, which represents schools for American dependents in Germany, France, England, Italy, French Morocco, and Turkey. American dependents' schools in these countries provide education for some 60,000 children of U. S. Army, Air Force, and Navy personnel, plus those of civilians living on the military bases. Col. John J. Livingston of Headquarters, V Corps, Frankfurt, Germany, is president of the European Congress. Special problems which American military communities face abroad were described by Maj. Howard J. Funston of 11th Field Hospital, Augsburg, third vice-president of the European Congress, who told the 1957 National Congress convention: "These American parents must provide, largely through their local P. T. A., many of the community functions that are normally afforded by local governmental agencies in the U. S."

A university's role in adult education will be studied by a faculty-administrative committee at Boston University. The committee, headed by Prof. Max Kaplan, consultant to the Arts Center, School of Fine and Applied Arts, will make recommendations to the administration and faculty for the improvement of adult education . . . **Health aspects** of relations between Latin-American and English-speaking groups will be studied by Michigan State

University researchers under a $142,760 grant from the U. S. Public Health Service to the university's department of sociology and anthropology. Selected communities and hospitals in the U. S., on the borders of the U. S., and in Latin America will be included in the study. One phase of the research concerns utilization of hospital and welfare facilities by Spanish-speaking groups. Charles P. Loomis, research professor, said, "We are also interested in knowing to what extent Spanish-speaking peoples become doctors, nurses and welfare workers and the problems they have in attaining such positions."

To interest young people in research, the National Broadcasting Co. and the Educational Television and Radio Center, Ann Arbor, Mich., will telecast a 13-week program series direct from New York University's medical center. Produced in collaboration with the American Heart Association, the series ("Decision for Research") will show research work in process as the producers try to transmit the flavor and excitement of research to young viewers. The methods, aims, achievements, and rewards of medical investigation will be pointed up . . . **"Science—6th Grade,"** the first in-school TV series in Massachusetts, was launched the end of last month on WGBH-TV, Channel 2. Owen B. Kiernan, the state's Commissioner of Education, and elementary school teachers already have briefed classroom teachers via TV on details of the in-school TV series and have suggested the best use of "Science—6th Grade" study guides which have been distributed to the 49 participating school systems. The fall schedule of daily in-school programs will include the following subject matter: science, social studies and citizenship, music and art, and literature and drama. These in-school programs are presented by the Eastern Massachusetts Council for School TV, administered by the Mass. executive committee for school TV appointed by the state Board of Education.

Talented High-School Students and College: Plans to identify and motivate more talented high-school students to attend college were announced March 25 by the North Central Association of Colleges and Secondary Schools. Supported by a grant of $174,000 from the Carnegie Corp., the program will be launched this summer with workshops for high-school administrators and counselors at five universities. The University of Michigan will host the opening workshop, June 23-27. Clyde Vroman, the university's director of admissions, said, "Methods designed to identify students who should go to college have little effect, unless they are followed up by action to guide and motivate students in the right direction. The lack of such action programs is the major bottleneck in helping superior students realize the maximum of their potentials in ability and talent." . . . **The University of California** (Berkeley) has received in 1957 more than $20,000,000 in gifts, including research grants, and thousands of books, documents, equipment, and scientific specimens.

Foreign Students in Germany: The most recent figures on academic enrollment in West Germany indicate that nearly 150,000 students were attending universities during the summer semester of 1957. Of this number, over 10,000, or seven per cent, were from other countries. The University of Munich had 1,250 foreign students; the University of Heidelberg, 800; the University of Bonn, 580; the University of Hamburg and the University of Mainz, 450 each. About 26% of the foreigners specialized in technology, 24% in medicine, and 14% in the arts. This report comes from the weekly *Bulletin* (Feb. 25, 1958), Press and Information Office, German Federal Government, Bonn . . . **Foreign student enrollment at NYU** reached a record total of 2,295 during the 1957-58 academic year, according to Dr. J. Richard Toven, director, university's Foreign Student Center. The students came from more than 75 nations and are enrolled primarily in the Graduate School of Arts and Science, the NYU-Bellevue Medical Center, and the Graduate School of Business Administration.

1 child in 10

. . . born each year, may some day be a mental patient!

UNLESS . . .

we have more research, clinics, and psychiatrists to cut this terrible toll!

Give! Mental Health Campaign

The Board of Education of the Methodist Church

Presents the first five in its series of "Studies in Christian Higher Education"—

1. ***Problems in College Administration*** by A. J. Brumbaugh $1.00
2. ***Building a Faculty in a Church-Related College of Liberal Arts*** by Clarence E. Ficken $1.00
3. ***The Education of the Administrator*** by Goodrich C. White $1.00
4. ***An Experiment in General Education: Development and Evaluation*** by William E. Kerstetter and Phillips Moulton $1.00
5. ***Handbook for Trustees*** by Myron F. Wicke $ .75

Order these basic books for the college administrator from

Director of Information and Publications
Division of Educational Institutions
Methodist Board of Education, Box 871
Nashville 2, Tennessee

A modern language electronic laboratory has been installed at St. Peter's College (Jersey City, N. J.). Forty-two students, each in a semi-soundproof booth, can receive simultaneous instruction in Italian, German, French, Spanish, and Russian. Every booth is equipped with a receiving set, earphones, and microphone. The student listens to a pre-recorded lesson (put on tape by his teacher), imitates what he hears, and receives instructions and corrections from his teacher at the console. By means of the magnetic tape recorder the teacher can monitor in one hour the number of students to whom he would devote two hours in the ordinary classroom procedure. Dr. John Hughes, chairman, modern languages department, is in charge of the project . . . **School boards** should set aside funds for testing and research to improve their academic programs, said Everett N. Luce, president, National Association of School Boards, at a conference of school board members and school officials, University of Michigan, March 25. "If money could be made available to school administrators to hire the necessary personnel," he stated, "real advances would be made in the local school districts in improving our school curriculum. Furthermore, we would be placing the responsibility in the hands of local people and we would be maintaining local control over our educational programs, exactly where it belongs."

The National Education Association will undertake an evaluation of present-day education on the elementary and high-school levels. This will be the first project of the NEA's newly organized Council on Instruction and will be under the direction of Doak S. Campbell, former president, University of Florida . . . **East Asian Studies Program:** To strengthen studies on Eastern Asia in many liberal arts colleges, the Center for East Asian Studies at Harvard is establishing a new program of fellowships. Each year, five to eight college teachers will come to Harvard for supplementary studies in this field. While not becoming specialists on the Far East, they will prepare to introduce new courses on Asia and also to enrich existing courses with comparative content about Asian cultures. The Ford Foundation has granted $125,000 in support of this program during the next three years. Each fellow's college will assure that there will be ways in which the professor can apply the experience after returning to his campus . . . The University of Notre Dame has announced a $66,600,000 development program geared "to consolidate and further its academic excellence" during the next 10 years.

Tuition—Up and Down: Juniata College (Huntingdon, Pa.) is increasing tuition and room-and-board fees for 1958-59 to $700 and $550, respectively. The University of Pennsylvania also has announced increases in tuition in the majority of its schools for the fall term (from $50 to $150 annually), thus bringing the total annual tuition to $1,050 for most undergraduates. Contrary to the present trend of rising tuition, St. Michael's College (Winooski, Vt.) will reduce tuition this fall for parents who have more than one son enrolled. The $800 tuition will be cut to $600 for a second brother and to $400 for a third brother attending at the same time . . . **Seminar and Workshop Abroad:** Participants in the ninth Seminar on Western Europe Today of NYU's School of Education will visit and study in England, Belgium, Germany, Switzerland, Italy and France during July and early Aug. For college teachers of Hebrew, the Bible, and related subjects, the school also is conducting a Graduate Workshop in the Land of the Bible (July 2-Aug. 13), which provides for study in Israel . . . **"The Language Arts Concentration,"** a new program for training junior and senior high-school teachers of English, speech, and journalism, has been created at the University of Kansas. "The object of the program," said Dean Kenneth E. Anderson of the School of Education, "is to provide both a broader and more intensive degree of specialization in subject matter for the prospective teacher."

NEW POSTS . . .

The National Commission on Accrediting elected the following officers: president—Albert N. Jorgensen,

The FIRST anthology to apply contemporary methods of philosophical analysis to educational problems.

Philosophy and Education

Edited by Dr. Israel Scheffler, Harvard University

Unfolding a collection of essays on the underlying conceptual problems in education, Dr. Scheffler's new text presents philosophical analysis as a set of tools, not a new dogma. The text relates how philosophy is best discussed, and what types of reasoning are appropriate in educational contexts. In his lucid introduction Dr. Scheffler explains philosophic backgrounds, and the importance of fusing philosophic methods and educational concerns, with a brief listing of such methods.

PHILOSOPHY AND EDUCATION *enriches* philosophy by diversifying the scope of its methods and *strengthens* education by bringing its foundations under intensive new cultivation.

For your first press copy, write to:

ALLYN and BACON
College Division
41 Mount Vernon St., Boston 8, Mass.

SYRACUSE UNIVERSITY
DIVISION OF SUMMER SESSIONS

extends an invitation to you to enjoy

a stimulating and delightful summer

Syracuse University is the ideal school for a summer combining study and vacation—intensive and extensive curriculum taught by outstanding visiting and resident faculty • a traditionally fine array of workshops and conferences • a wealth of cultural opportunities • spectacular mountain resort area.

6 weeks session: June 30 - August 8

5 weeks session: August 11 - September 12

For specific information on programs in these areas: religion, radio and television, science, fine arts, education, journalism, political science, conservation or any other write to the Syracuse University Division of Summer Sessions, Box 19, 805 S. Crouse Avenue, Syracuse 10, New York.

THE PRACTICE OF SCHOOL ADMINISTRATION

Herold C. Hunt, Harvard University

Paul R. Pierce, Purdue University

Pioneer thinking, recent research, and successful practice—all these are evident in this new book which puts educational administration on a truly professional level. The authors describe how principles can be used in determining policies and practices of administration, and they emphasize democratization of school administration. They show clearly what must be done and what has been done in the field of school administration. Approximately 600 pages. A June, 1958 Publication.

HOUGHTON MIFFLIN

Boston 7 New York 16
Chicago 16 Dallas 1
Palo Alto

New RONALD *Books*—

TEACHING in ELEMENTARY SCHOOL

MARIE A. MEHL, HUBERT H. MILLS, *and*
HARL R. DOUGLASS — *all University of Colorado*

SECOND EDITION of this popular education textbook incorporates modern concepts of the child's physical, emotional, social, and intellectual development and related educational procedures. Stressing the teacher's daily activities, book describes and explains child growth and development, course-of-study planning, use of problems and projects, learning outcomes, creative learning, etc. Covers other responsibilities: directing extraclass activities; counseling; measuring, evaluating pupil growth, assisting in curriculum planning; using research materials. *26 ills., 518 pp.*

The READING TEACHER'S READER

Edited by **OSCAR S. CAUSEY,**
Texas Christian University
Prepared by 81 Contributors

AUTHORITATIVE SELECTIONS on the major aspects of reading — at all levels. This new textbook treats the nature of the reading process and shows the methods and procedures teachers use to direct the student's learning process effectively. A section on phonics analyzes its role in the reading program. Book identifies many of the emotional factors and problems of reading, showing their probable solutions; evaluates audio-visual materials as aids in reading improvement. Includes findings of recent investigations in the size of vocabularies and their growth.

11 ills., tables; 339 pp.

An Introduction to AMERICAN EDUCATION

JOHN T. WAHLQUIST *and* **PATRICK J. RYAN**
— *both San Jose State College*

SECOND EDITION. This practical textbook stresses guidance and orientation of prospective teachers by answering innumerable questions regarding the profession. It helps the student to see education as a whole from the very start and to understand the role of education in America. Book covers the qualifications of a successful teacher and explains how the student can make a reasoned decision for or against teaching after carefully analyzing his own interests, capacities, and personality. Outlines the opportunities for careers in education. *110 ills., tables; 477 pp.*

THE RONALD PRESS COMPANY
15 East 26th St., New York 10, N. Y.

president, University of Connecticut; vice-president—John S. Millis, president, Western Reserve University; secretary-treasurer—Martin D. Whitaker, president, Lehigh University; executive committee—O. C. Aderhold, president, University of Georgia; Milo Bail, president, University of Omaha; David D. Henry, president, University of Illinois; Henry W. Littlefield, vice-president, University of Bridgeport; E. Wilson Lyon, president, Pomona College; Elbert B. Norton, president, Florence State College; and O. M. Wilson, president, University of Oregon . . . **Seymour A. Smith,** associate professor of religion in higher education, Yale University Divinity School, appointed president, Stephens College (Columbia, Mo.)

SAE Election of Trustees: The members of the Society for the Advancement of Education have elected the following Trustees for 1958-1962: Carter Davidson, president, Union College (Schenectady, N. Y.); Theodore A. Distler, executive director, Association of American Colleges; and Raymond Walters, president emeritus, University of Cincinnati . . . **Gordon B. Carson,** dean, College of Engineering, Ohio State University, named vice-president . . . **The University of Wisconsin** announces the following appointments: Fred H. Harrington, vice-president of academic affairs; George W. Denemark, dean and professor of education (Milwaukee campus); Guy H. Orcutt, Brittingham Professor of Economics; and Robert J. Lampman, professor of economics. Allan W. Ostar, director of editorial and communications services, Extension Division, was granted a two-year leave of absence to head a national project on public higher education.

Loren E. Edwards succeeds Charles R. Estill as director of development and public relations, Clarkson College of Technology (Potsdam, N. Y.). Mr. Estill has assumed duties as director of development, Johns Hopkins Medical Institutions . . . **Frederick H. Stutz,** assistant dean, School of Education, Cornell University, advanced to deanship of the school and head, department of rural education, effective July 1 . . . **Charles K. Weichert,** head, department of biological sciences, University of Cincinnati, named dean of the university's McMicken College of Arts and Sciences, effective Sept. 1 . . . **Kullervo Louhi and Charles J. Gaa** appointed associate dean, College of Business and Public Service, and professor in the newly created department of accounting and financial administration, respectively, Michigan State University (East Lansing).

Clifford P. Hooker and Glenora Edwards named assistant dean, School of Education, and head, documents department of university library, respectively, University of Pittsburgh (Pa.) . . . **James S. Coleman,** assistant professor of sociology, appointed chairman, Committee on Communication, University of Chicago . . . **University of Michigan appointments:** George E. Hay, chairman, department of mathematics; Paul M. Fitts, professor of psychology; Thomas G. Winner, associate professor of Slavic languages; assistant professors, Martin Dyck (German), Robert R. Lewis (physics), and Robert J. Nelson (French) . . .**New instructors** at Kent (Ohio) State University: Tom S. Cooperrider (biology), and John A. Forman and James K. Irikura (history).

RECENT PUBLICATIONS

(Continued from page 196)

A Study of Leisure and Recreation in Their Sociological Aspects, third edition, pp. 473, $5.50; STAFFORD, GEORGE T., and ELLEN D. KELLY, *Preventive and Corrective Physical Education,* third edition, pp. 396, $5.00; THOMAS, CHARLES K., *An Introduction to the Phonetics of American English,* pp. 273, $4.50; WATKINS, RALPH K., *Techniques of Secondary School Teaching,* pp. 385, $5.00. Ronald Press, New York 10.

FIELD, STANLEY. *Television and Radio Writing.* Pp. 544. Houghton Mifflin Co., Boston 7. $5.00.

John Amos Comenius

Issued in commemoration of the third centenary of the publication of *Opera Didactica Omnia*, by Comenius, the great Czech educator, who is described as "one of the first men to propagate the ideas which UNESCO took for its guidance at the time of its establishment." The basic principle at Saros Patak, the last school of which Comenius was the head, was: "All that is presented to the intellect, the memory, the tongue, and the hand, the pupils shall themselves seek, discover, discuss, do and repeat, without slacking, by their own efforts, the teachers being left merely with the task of seeing whether what is to be done is done, and done as it should be." After an Introduction by Jean Piaget, Director of the International Bureau of Education, there are generous selections from the following of Comenius's works: *The Labyrinth of the World and the Paradise of the Heart; The Great Didactic; The Pampaedia;* and *The Panorthosia.*

A UNESCO *publication.* 183 pp. **Paper, $3.25**

STUDY ABROAD

This new and revised edition of an indispensable handbook in the field of education offers more than 75,000 opportunities for study in a country other than one's own. The United Nations and its agencies, other international organizations, governments, universities and colleges are among the sponsoring institutions and agencies whose educational programs are listed. Information is given on where to apply, who is eligible, fields of study, lengths of courses and amounts of the awards. A UNESCO *publication.* 740 pp. **Paper, $2.50**

VACATIONS ABROAD

Among the 926 vacation projects listed in this tenth edition are vacation courses, study tours, hostels, holiday camps and centers, international voluntary work camps and centers, international voluntary work camps, and vacation scholarships. Fifty-eight countries are represented. While in most cases the emphasis is on study, there is always ample opportunity for sports and relaxation. All activities offer opportunities for visitors to get to know other countries and to exchange ideas with people of different nationalities. A UNESCO *publication.* 190 pp. **Paper, $1.00**

World Illiteracy at Mid-Century

How many illiterates are there in the world? What can be done to prevent the relapse into illiteracy of those who have been taught to read and write? In the middle of the twentieth century more than two-fifths of the total world population are illiterate, about 700 million or about 44 per cent of the total world population. "The present study is the first attempt to present estimates on the extent of illiteracy in every country and territory of the world. Detailed analyses are given in the present work for some 65 countries, based on available census data since about 1945."—*From the Introduction.* A UNESCO *publication.* 200 pp. **Paper, $2.00**

UNESCO

International Documents Service

Columbia University Press

New York 27, New York

MR. STEVENS RICE FREE
UNIVERSITY MICROFILMS
313 N. FIRST ST.
ANN ARBOR, MICH.

NOW AVAILABLE

An anthology containing substantial portions of some of the best known works in the philosophy of education —

SELECTED READINGS IN THE PHILOSOPHY OF EDUCATION

edited by Joe Park, Northwestern University
1958 440 pages $5.00

- Organized according to the philosophical position of the author
- Covers a wide range of philosophical thought—Pragmatism, Idealism, Realism . . . Catholicism, Protestantism, Judaism
- Presents extensive biographical sketches

SPEAKING FOR ITSELF —

TABLE OF CONTENTS

I. THE PLACE OF PHILOSOPHY IN THE STUDY OF EDUCATION
Introduction
A Brief for the Philosophy of Education . . . Ross Lee Finney
The Challenge to Philosophize about Education . . . John Seiler Brubacher
Philosophy of Education—Directive Doctrine or Liberal Discipline? . . . Everett John Kircher

II. THE PRAGMATIC PHILOSOPHY OF EDUCATION
What Pragmatism Means . . . William James
Democracy and Education . . . John Dewey
Experience and Education . . . John Dewey
The Disciples of Dewey: Bode, Childs, and Kilpatrick
Progressive Education at the Crossroads . . . Boyd Henry Bode
Education and Morals . . . John Lawrence Childs
Philosophy of Education . . . William Heard Kilpatrick
Social Reconstruction: Counts and Brameld
Dare the School Build a New Social Order? . . . George Sylvester Counts
Toward a Reconstructed Philosophy of Education . . . Theodore Brameld

III. IDEALISM
The Philosophical Aspects of Education . . . Herman Harrell Horne
Twenty-three Years Later . . . Herman Harrell Horne
Liberal Education Reconsidered . . . Theodore Meyer Greene
The Outline of a Philosophy . . . J. Donald Butler

IV. REALISM
Education and the New Realism . . . Frederick S. Breed
The Aims of Education . . . Alfred North Whitehead
The Rhythm of Education . . . Alfred North Whitehead
Education and Human Society: A Realistic View . . . John Daniel Wild
The Classical Humanists: Adler and Hutchins
Philosophies of Education . . . Mortimer Jerome Adler
The Conflict in Education . . . Robert Maynard Hutchins

V. THE CATHOLIC PHILOSOPHY OF EDUCATION
Christian Education of Youth . . . Pope Pius XI
The Philosophy of Catholic Education . . . William Francis Cunningham
Education at the Crossroads . . . Jacques Maritain

VI. THE PHILOSOPHY OF EDUCATION IN SOME PROTESTANT AND JEWISH THOUGHT
The Christian View of Man and the Meaning of Freedom and Authority in Education . . . J. Donald Butler
Religion and the Philosophies of Education . . . Theodore Meyer Greene
Current Lutheran Thought on the Philosophy of Education
Readings in the Lutheran Philosophy of Education . . . Arthur Leonard Miller
Readings in the Lutheran Philosophy of Education . . . A. C. Mueller
Jewish Education in the United States at the Mid-Century . . . Israel S. Chipkin
Church-State Separation and Religion in the Schools of Our Democracy . . . George Huntston Williams

Index

The Macmillan Company
60 FIFTH AVENUE, NEW YORK 11, N.Y.